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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/648,420

08/23/2000

Richard David Day

SPEE0014

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29989

7590

11/03/2006

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EXAMINER

TODD, GREGORY G

ART UNIT

PAPER NUMBER

2157

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/648,420

Applicant(s)

DAY ET AL.

Examiner

Gregory G. Todd

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/16/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This office action is in response to applicant's amendment after final filed, 29 September 2005, of application filed, with the above serial number, on 28 August 2000 in which claims 1 and 8 have been amended. Claims 1-14 are therefore pending in the application.

Examiner thanks Applicant for the interview of 06 September 2006. It was mutually agreed to reopen the application to update the search and provide the appropriate decision therefrom. As such, Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chauhan (hereinafter "Chauhan", 6,115,752) in view of Scharber (hereinafter "Scharber", 6,542,964), and further in view of Einarson et al (hereinafter "Einarson", 6,704,781)

As per Claim 1, Chauhan teaches a method, comprising:

receiving a request from a user for a web page at a first web address, the first web address including the hostname (request for address) (at least col. 6, lines 45-53);

determining traffic loads of a plurality of mirrored customer web servers, each of the customer web servers storing the web page (mirrored server round trip times) (at least col. 7, lines 24-42);

determining a customer web server from the plurality of mirrored customer web servers that is appropriate for the request, the customer web server having a traffic load lower than traffic loads of remaining customer web servers from the plurality of mirrored customer web servers (mirrored server with best route) (at least col. 7, lines 24-42);

determining an IP address of the customer web server (address name server) (at least col. 1, lines 41-53; col. 6, lines 45-63);

directing the request from the user to the customer web server (ONS routing request) (at least Fig. 4); thereafter

receiving a request from the user for content on the web page at a second web address, the second web address including the hostname (request for an address) (at least col. 6, lines 45-53);

determining service metrics of servers in a network of servers (mirrored server round trip times) (at least col. 7, lines 24-42);

determining the server from the network of servers that is appropriate for the request for content, the server having service metrics better than service metrics of remaining servers from the network of servers (mirrored server with best route) (at least col. 7, lines 24-42).

Chauhan does not explicitly teach caching servers as having cached static content thereon to further mirror data of a customer webpage. However, the use and advantages for using such a cache server is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Scharber. Scharber discloses many types of cache servers including POP cache servers for redirecting requests for a most economical delivery of content to an end user (at least col. 4, lines 13-26, 46-56; col. 1, lines 60-67; col. 7, lines 3-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of Scharber's POP cache serving into Chauhan's system as this would further enhance Chauhan's system to lessen load and traffic on mirror sites and use Chauhan's optimizing address name translating with Scharber's POP cache servers so as to geographically optimize latency between a client and static content from a server thereon. Further, it is very well known in the art to use proxy / caching servers to serve static content from a host to users, as Scharber teaches, and to also use mirror servers as Chauhan teaches.

Chauhan and Scharber (hereinafter "the combination") fail to teach a customer paying a fee to a service for use of the network of caching servers storing static content for the customer. However, the use and advantages for using such a system is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Einarson. Einarson clearly teaches offering compensation via fees to a cache owner for caching services for ultimately providing the best caching services to the customer as it limits the amount of content to be stored (at least col. 1, lines 27-35;

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col. 2 line 23 – col. 3 line 7). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to incorporate charging a customer a fee into the combination's system as compensation for the generation of revenue for providing such caching services is needed.

As per Claim 2.

determining load of servers in the network of servers (at least col. 2, lines 14-33; col. 3, lines 39-53);

wherein determining the server from the network of servers that is appropriate for the request, the server having a latency and a load lower than latency or load of the remaining servers from the network of servers (at least col. 2, lines 14-33; col. 3, lines 39-53).

As per Claim 3.

Chauhan and Einarson do not disclose caching static content. However, the use and advantages for using such caching is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Scharber. Scharber discloses:

determining whether the caching server includes the static content;
determining a web server that includes the static content when the caching server does not include the static content (at least Scharber col. 4, lines 13-26, 46-56);

retrieving the static content from the web server that includes the static content (at least Scharber col. 4, lines 13-26, 46-56); and

storing the static content from the web server in the caching server (caching static content) (at least Scharber col. 4, lines 13-26, 46-56).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Scharber's static page caching into Chauhan and Einarson's system as this is very well known in the art as to how server caching is performed for client requested static content.

As per Claim 4.

wherein determining the web server comprises:

determining traffic loads of the plurality of mirrored customer web servers, each of the customer web servers storing the static content (mirror servers) (at least col. 3, lines 39-53); and

determining another customer web server from the plurality of mirrored customer web servers that is appropriate for the request, the another customer web server having a traffic load lower than traffic loads of remaining customer web servers from the plurality of mirrored customer web servers (best route to mirror server) (at least col. 3, lines 39-53).

As per Claim 5.

Chauhan and Einarson do not disclose caching from another server. However, the use and advantages for using such a caching protocol is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Scharber. Scharber discloses wherein retrieving the static content from the web server comprises:

determining another IP address of the another customer web server (peer cache or origin) (at least Scharber col. 4, lines 46-56); and

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requesting the static content from the another customer web server at the another IP address (retrieving content from origin server) (at least Scharber col. 4, lines 46-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Scharber's static page caching into Chauhan and Einarson's system as this is very well known in the art as to how server caching is performed for client requested static content.

As per Claim 6.

wherein the network of servers comprises a domain name server (at least col. 1, lines 41-67).

As per Claim 7.

wherein the request from the user for the web page is transferred from a first domain name server (local name server) (at least Fig. 4);

wherein the network of servers comprises a second domain name server (ONS) (at least Fig. 4; col. 3, lines 23-38); and

wherein the second domain name server determines the customer web server from the plurality of mirrored customer web servers (ONS determines mirror server) (at least col. 3, lines 39-53).

As per Claim 8, Chauhan teaches a method, comprising:

receiving a first request from a client DNS server to resolve a first domain name, the client DNS server receiving a request from a user of a web page address that includes the first domain name (request for address) (at least col. 6, lines 45-53);

determining load measurements of a plurality of mirrored customer web servers, each of the customer web servers addressable by the first domain name, and each of the customer web servers configured to service the request from the user (mirrored server round trip times) (at least col. 7, lines 24-42);

determining a customer web server from the plurality of mirrored customer web servers, the customer web server having a traffic load lower than traffic loads of other customer web servers from the plurality of mirrored customer web servers (mirrored server with best route) (at least col. 7, lines 24-42);

determining an IP address of the customer web server (address name server) (at least col. 1, lines 41-53; col. 6, lines 45-63);

providing the IP address of the customer web server to the client DNS server (LNS) (at least Fig. 4; col. 3, lines 39-53); thereafter

receiving a second request from the client DNS server to resolve a second domain name, the client DNS server receiving a request from the user of a uniform resource locator that includes the second domain name (request for an address) (at least col. 6, lines 45-53);

determining performance metric measurement of servers in a network of servers, each of the caching servers addressable by the second domain name (mirrored server round trip times) (at least col. 7, lines 24-42);

determining a server from the network of servers, the server having performance metrics lower than performance metrics of other servers from the network of servers (mirrored server with best route) (at least col. 7, lines 24-42);

providing the IP address of the server to the client DNS server (LNS) (at least Fig. 4; col. 3, lines 39-53).

Chauhan does not explicitly teach caching servers as having cached content thereon to further mirror data of a customer webpage. However, the use and advantages for using such a cache server is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Scharber. Scharber discloses many types of cache servers including POP cache servers for redirecting requests for a most economical delivery of content to a end user (at least col. 4, lines 13-26, 46-56; col. 1, lines 60-67; col. 7, lines 3-7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of Scharber's POP cache serving into Chauhan's system as this would further enhance Chauhan's system to lessen load and traffic on mirror sites and use Chauhan's optimizing address name translating with Scharber's POP cache servers so as to geographically optimize latency between a client and content from a server thereon. Further, it is very well known in the art to use proxy / caching servers to serve static content from a host to users, as Scharber teaches, and to also use mirror servers as Chauhan teaches.

As per Claim 9.

wherein the load measurements comprise latency measurements (at least col. 2, lines 1-9, 42-57).

As per Claim 10.

wherein the performance metric measurements comprise any of: load CPU and memory measurements, HTTP response measurements, and FTP response measurements (load, ping) (at least col. 2, lines 14-33; col. 3, lines 54-66).

As per Claim 11.

Chauhan and Einarson do not disclose caching static content. However, the use and advantages for using such caching is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Scharber. Scharber discloses wherein retrieving data from the caching server comprises:

determining whether the caching server includes the data (at least Scharber col. 4, lines 13-26, 46-56);

retrieving data from another customer web server from the plurality of mirrored customer web servers when the server does not include the data (at least Scharber col. 4, lines 13-26, 46-56); and

storing the data within the server (caching static content) (at least Scharber col. 4, lines 13-26, 46-56).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Scharber's static page caching into Chauhan and Einarson's system as this is very well known in the art as to how server caching is performed for client requested static content.

As per Claim 12.

wherein retrieving data from the other customer web server comprises:

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determining the other customer web server from the plurality of mirrored customer web servers, the other customer web server having a traffic load lower than traffic loads of remaining customer web servers from the plurality of mirrored customer web servers (at least col. 2, lines 14-33; col. 3, lines 39-53); and

retrieving the data from the other customer web server (download content) (at least col. 2, lines 1-9).

As per Claim 13.

receiving a first request from a second client DNS server to resolve a third domain name, the second client DNS server receiving a request from a second user of a second web page address that includes the third domain name (at least Fig. 4);

determining load measurements of a plurality of second customer web servers, each of the second customer web servers addressable by the third domain name, and each of the second customer web servers storing data configured to service the request from the second user (mirrored servers) (at least Fig. 4);

determining a second customer web server from the plurality of second customer web servers, the second customer web server having a traffic load lower than traffic loads of other second customer web servers from the plurality of second customer web servers; determining an IP address of the second customer web server (at least col. 2, lines 14-33; col. 3, lines 39-53); and

providing the IP address of the second customer web server to the second client DNS server (IP2) (at least Fig. 4).

As per Claim 14.

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Chauhan inherently discloses more than one user using the system, and that with any user, the mirror site with the best performance characteristics will be chosen as the server to retrieve content from thereon:

receiving a second request from the second client DNS server to resolve the second domain name, the second client DNS server receiving a request from the second user of a second uniform resource locator that includes the second domain name (at least Fig. 4; col. 2, lines 10-33);

retrieving a second set of data from the caching server in response to the second uniform resource locator (at least Fig. 4; col. 2, lines 10-33); and

providing the second set of data to the user (at least Fig. 4; col. 2, lines 1-33).

Response to Arguments

4. Applicant's arguments filed 03 October 2006 have been fully considered but they are not persuasive. Upon an updated search, Einarson is shown to teach the amended features of the claims in combination with Chauhan and Scharber. As finality of the previous Office Action has been withdrawn and Applicants amendment thereby treated as Applicants response to a non-final Office Action, it is proper to allow Applicant to have amended the claims and thus for this action to be made Final.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Newly cited Lin et al (see paragraph 19) and Shimomura et al (see col. 14, lines 15-27), in addition to previously cited Lara et al, Kenner et al, Levy, Jordan et al, Kumar et al, Jacobs et al, Amicangioli, Heddaya et al, Schuba, Bharat et al, Lewis et al, O'Neil et al, Bolton et al, Emens et al, Shah, Leighton et al, Logan et al, Rune, Sitaraman et al, Malcolm, Herriot, Kapoor, and Gupta et al are cited for disclosing pertinent information related to the claimed invention. Applicants are requested to consider the prior art reference for relevant teachings when responding to this office action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory G. Todd whose telephone number is (571)272-

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4011. The examiner can normally be reached on Monday - Friday 9:00am-6:00pm w/ first Fridays off.

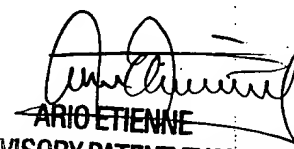
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregory Todd

Patent Examiner

Technology Center 2100


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